OHIO RIVER VALLEY WATER SANITATION COMMISSION

MINUTES

199th Meeting of the Technical Committee Oglebay Resort & Conference Center Wheeling, West Virginia June 12- 13, 2012

Chairman Toby Frevert, Presiding

(Note: Power Point presentations from this meeting can be found on the ORSANCO web site: www.orsanco.org)

Call to Order

The 199th meeting of the ORSANCO Technical Committee was called to order by Chairman Frevert at 1:00 pm EDT on Tuesday, June 12, 2012. Seven states, two federal agencies and four Commission advisory committees were represented. (For Roster of Attendance, see page 10.)

Minutes of 198th Committee Meeting

<u>ACTION</u>: Motion passed to accept the minutes of the 198th Technical Committee meeting.

Chief Engineer's Report

Mr. Tennant reported on a number of items:

USEPA Tri-Regional Call – ORSANCO sets up a call with the three USEPA regions prior to every TEC/Commission meeting to brief EPA on the issues and to obtain their input. These calls have gained some importance since there have been no travel funds available for Region 3 to participate in ORSANCO's meetings. Regions 3 and 5 participated in the most recent call. Mr. Tennant suggested that Region 3 look into the possibility of someone from its Wheeling, WV field office participate in future meetings to reduce their travel costs.

National Response Center – Staff continues to work towards receiving complete spill reports from the NRC. Senator Rockefeller as well as the USEPA has supported this initiative, however options appear to be running out at this time. Staff is able to get the necessary responsible party information but it requires additional steps.

Toxic Release Inventory Report – Mr. Tennant indicated that a recent report by environmental groups using TRI data once again singled out the Ohio River as receiving the most toxic waste in the country. Staff investigated and found that over ninety percent of what was reported as toxic compounds of nitrate, and that over three quarters of the total discharges were from two facilities. Nitrate is not considered a toxic substance within Clean Water Act programs, and as such, utilization of the TRI data within this context results in a misleading picture of the progress being made.

Spill Reporting – Staff is working with Senator Rockefeller's office to put language into the Coast Guard appropriation bill which will result in ORSANCO being able to receive all spill information from the National Response Center. In addition, the Coast Guard is drafting a memorandum of understanding for the National Response Team that would also allow ORSANCO to receive the necessary spill information.

National Monitoring Conference – Mr. Tennant is working with the National Monitoring Council to bring the 2014 conference to Cincinnati.

FY2013 Technical Programs

Staff presented an overview of the FY13 technical programs which included TEC's recommendations for additional fish tissue mercury data and development of a protocol for use of outside monitoring data in 305b assessments. Staff also outlined additional projects to be undertaken with available FY12 federal 106 funds. An attachment to the 199th TEC meeting agenda contains a full listing of the FY13 technical program plus additional FY12 106 projects.

ACTION: Motion passed to endorse the proposed FY13 technical programs and additional FY12 106-funded projects.

2012 Assessment of Ohio River Water Quality Conditions (305b)

Staff reported that the 2012 305(b) assessment report has been drafted per TEC's direction. The overall state by state summary of those assessments are as follows:

		No. of Miles Use Designated Impaired			
	River Miles	Aquatic Life	Contact	Public Water	Fish
			recreation	Supply	Consumption
PA	0.0-40.2	0.0	40.2	0.0	40.2
OH-WV	40.2-317.1	0.0	242.2	0.0	276.9
OH-KY	317.1-491.3	0.0	64.2	0.0	174.2
IN-KY	491.3-848.0	0.0	243.6	0.0	356.7
IL-KY	848.0-981.0	0.0	40.6	0.0	133.0
Total	981.0	0.0	630.8	0.0	981.0

ACTION: Motion passed to approve the 2012 305(b) Report for publication.

NPDES Subcommittee Report

The NPDES Subcommittee met by conference call on May 15 to discuss permitting procedures for criteria that apply at drinking water intakes, nutrient discharge monitoring requirements, and discharges from coal fired power plant FGD scrubbers. The subcommittee made the following recommendations, which were endorsed by TEC:

- 1) ORSANCO consider USEPA's Technical Support Document and then develop a common set of procedures to promote consistency in developing discharge effluent limits for criteria that apply at downstream drinking water intakes.
- 2) Evaluate temporal and longitudinal trends in mercury concentrations in relation to FGD scrubbers.

Monitoring Strategy Subcommittee Report

The Monitoring Strategy Subcommittee had not met in several years. As a result, this first conference call in quite some time was for the purpose of reacquainting subcommittee members with ORSANCO's monitoring programs and monitoring strategy. A meeting of the subcommittee will be scheduled for fall 2012 to begin working on revision of the monitoring strategy.

Total Dissolved Solids Study

Staff presented an update on the total dissolved solids study. Primary objectives of the study were to characterize concentrations of TDS and bromide, develop site-specific translators to convert conductivity to TDS, and provide data to support potential future development of a stream criterion for bromide. Weekly samples are being collected from eleven mainstem and five tributary sites for a one-year period ending December 2012. Mainstem TDS concentrations have ranged from 104 mg/L to 277 mg/L; the stream criterion is 500 mg/L. Tributary TDS concentrations have ranged from 62 mg/L to 363 mg/L with the highest concentrations generally occurring on the Muskingum River. Bromide has been detected in approximately forty percent of samples since the detection level was lowered to 35 ug/L. Maximum bromide concentrations measured were 553 ug/L on the mainstem and 1800 ug/L on the Beaver River.

TEC directed staff to collect total trihalomethane data from the utilities participating in the study. While the best location for trihalomethane data is immediately following treatment, the documentation is necessary on where the trihalomethane data is collected in the distribution system along with specifics of the disinfection treatment process.

Biological Studies

Staff reported on the availability of 2011 Pool Assessment Reports and what these reports generally contain. These reports are completed for each of four pools in which biological surveys are completed every year such that the entire river receives biological assessments every five years. Staff provided examples of the content of these reports which are written to be informative to the public. Since biological surveys have been previously completed for every pool, staff is now comparing the recent biological surveys to the past surveys on a pool by pool basis. Changes in assessments tend to be related to differing flow conditions.

Staff reported on the macroinvertebrate program and development of a macroinvertebrate index. Macroinvertebrate data have been collected since 2004 to support development of the index. A number of different approaches were evaluated along with 160 different metrics in order to create an index that is responsive to in-stream conditions. The index will be reviewed by the Biological Water Quality Subcommittee in December 2012.

Staff also reported on development of a periphyton index which utilizes diatoms. Diatom data were collected from 2007-2009 using 165 probabilistic sites in eleven pools to develop the index. One hundred twenty-two candidate metrics were evaluated for use in the index and ten metrics were selected based on their response to in-stream conditions. The results of this work will also be evaluated by the Biological Subcommittee in December.

Ohio River Source Water Protection

Staff presented results of a recent Ohio River Focus Group meeting of emergency response and criminal investigation personnel from Ohio, West Virginia, USEPA Regions 3 and 5, the US Coast Guard, and US Army Corps of Engineers. The group is coordinating development of a geographic information system for the upper river from the Pittsburgh point down to Willow Island Dam. It will ultimately contain discharge outfalls and other information such as storage tanks, pipelines, etc. that spill responders need. Staff is also involved with the development of an Incident Action Plan (IAP) for the Cincinnati area and presented information being developed under this emergency response plan. The Ohio River Spill Response Plan is an umbrella plan for the entire Ohio River that ORSANCO is also involved with.

Report of the Fish Consumption Advisory Workgroup

The workgroup met by conference call on May 25 and all six mainstem states were represented. The workgroup discussed the status of the states' getting signed the MOU on the Ohio River Fish Consumption Advisory protocol. It contains a consistent set of rules, which the workgroup has agreed to, for using Ohio River fish tissue data to issue fish consumption advisories to the public. Ohio and West Virginia have signed the MOU. Some of the difficulty in getting it signed by the remaining states is the number of agencies in each state that are involved in issuing advisories, such as the water quality agency, DNR and health departments.

For 2012, staff was directed to collect additional methyl mercury fish tissue data. As a result, 16 additional tissue samples were collected through the regular collection program, and forty additional samples are being collected with funding from a Kentucky SEP.

<u>Nutrients</u>

Staff reported on a Gulf of Mexico Hypoxia Task Force meeting held April 10-11 in Memphis. Actions from the meeting included: Federal agencies will develop an overall nutrient reduction strategy by the next meeting; and Creation of a Monitoring Strike Force to focus on monitoring needs. The Strike Force will be composed of state representatives familiar with the monitoring programs within their states. Initially, they will be creating an inventory of long-term water quality monitoring stations with at least ten years of bimonthly data, and then identifying future needs.

Concerning the Ohio River Basin pilot interstate water quality trading plan, there was a briefing on June 5 for the agriculture and permitting agencies in Indiana, Kentucky and Ohio, which are the states that will be participating in the pilot program. Environmental groups were also invited and several groups participated in the briefing. Signing of the plan by the three states is expected to take place later in the summer, after which pilot trades can begin. The current plan is to put in place \$100,000 in BMPs in each state. EPRI is managing the pilot plan and will generate credits that will then be sold. There are several buyers already identified. Goals of the pilot include evaluating the administrative aspects, environmental benefits, and whether there is interest in utilization of the program by the regulated community. Measures of success that will be tracked include: 1) Number of credits generated; 2) Number of trades executed; 3) Net loading of nutrients removed from the watershed, and; 4) economic benefits to buyers and sellers of credits.

Staff also reported that the Wabash River monitoring project first year report is available in hardcopy and on the website, and that the project has been extended for an additional three years. Results of the first year indicate that BOD from the Wabash may be a significant factor for dissolved oxygen levels in the Smithland Pool. In addition, annual loadings for total nitrogen and phosphorus were calculated which indicate that the Wabash River is a significant source of nutrients even though nutrients don't appear to be a significant cause for reduced dissolved oxygen levels in the Ohio River.

Pollution Control Standards

Proposed 2012 Revisions

Staff reported on the proposed 2012 revisions to the Pollution Control Standards, which include the following: 1) Formatting changes to the document; 2) Addition of a summary table of all criteria; 3) Revised temperature criteria for the protection of aquatic life; 4) Addition of a temperature criterion (110 deg F) for human health protection from exposure to water contact; 5) Removal of Fecal coliform criteria for human health protection from contact recreation; 6) Revision of monthly contact recreation assessment period to 90-day assessment period; 7) Revision of the single sample maximum E. coli criterion to a 25 percent exceedance rate; 8) Extension of the recreation season, when bacteria standards apply, to include April; 9) Removal of the variance approval provision requiring concurrence from all affected states; 10) Addition of language to the variance section ensuring that the permitting authority is allowed to incorporate provisions of a variance into the applicable permit, and; 11) Requires variances be incorporated into the Commission's standards. Two webinars open to the public were held in lieu of typical workshops to support public participation, and the public comment period closed on July 20, 2012.

PPG Natrium, WV Variance Request

A preliminary decision by the Pollution Control Standards Committee to approve the PPG variance request and open a thirty-day public comment period will be presented to the Commission at its Thursday meeting. Specific provisions of the proposed variance approval language include: 1) A variance to allow PPG a mixing zone for mercury is not to exceed five years; 2) PPG will be required to meet monthly average effluent limits of 0.055 ug/L for total mercury, and WVDEP shall determine any maximum daily limits in accordance with its rules; 3) PPG's mercury reduction plan shall be fully implemented and annual progress reports are required; 4) PPG will be required to conduct monthly water quality mercury monitoring of the Ohio River to ensure that the Commission's standards are met outside the mixing zone; 5) The Commission shall have the sole authority to modify, renew or revoke the variance at its discretion, and; 6) The variance would not interfere with WVDEP's authority to impose more restrictive requirements.

In addition, TEC received a status report on the continuing development of a variance application and review process for consideration of future variances. The intent is to put a formal process in place after the Commission has disposed of the PPG request. TEC endorsed the recommendations of the Pollution Control Standards Committee regarding the proposed 2012 standards revisions, the preliminary decision regarding the PPG variance request, and to develop a formal variance review process after the PPG variance request has been disposed.

Member Reports

Ohio

Mr. Elmaraghy reported on Ohio's Omnibus Bill SB294 which includes a fee program for 401 certifications and isolated wetlands permits, and coal mining and reclamation general permit application requirements. Assumption of the federal 404 certification program was dropped from the bill. The state has a workgroup for water quality standards and 401 rulemaking which is currently focusing on permits, cold water habitat, primary headwater habitat, and loss of stream use. Mr. Elmaraghy reported that the state is monitoring the Bokes Creek, Stillwater Creek and East Fork Little Miami River watersheds this summer. Cincinnati MSD is working on grit and secondary clarification improvements at the Mill Creek facility which should be completed June 2013. A mine in Jefferson County just downstream from the Cardinal plant will be dewatered in order to mitigate road slippage. A total of 46 MG will be discharged to the Ohio River. Downstream water users including Wheeling WTP and RG Steel have been notified. Regarding the DP&L Stuart plant, OHEPA issued a draft NPDES permit in December 2011 and USEPA has withdrawn its objections to the permit. The draft includes new discharges from Carter Hollow Landfill treatment requirements for the FGD scrubber. DP&L has hired a consultant to conduct a 316a variance demonstration and has not presented any plans to reduce its thermal loading.

Pennsylvania

Mr. Schwartz reported that there has been a decrease in drilling activities in the state as a result of the price drop in gas, as well as an increased interest in "wet gas" that is not abundant in the Marcellus shale. There has been a significant increase in pipeline projects in central and western PA which has created the need for drilling beneath roadways and streams. This practice has created some issues with the release of drilling fluids from these activities which are basically a mixture of water and clay and not considered toxic. There has been a significant increase in FGD scrubber permitting activities for power plants which are almost completed at this time. The agency received a notice of intent to sue (the company) by the Environmental Integrity Project regarding the Little Blue Run impoundment which borders PA and WV. This is a large ash disposal impoundment with a dam that is 200-300 feet high that has a number of seeps on the WV side. PA and WV have an MOU in place to address this issue. PADEP and WVDEP have been in communications regarding the gas drilling water management plans that are being approved by PADEP for withdrawals occurring in WV. PADEP will be directing companies to obtain approval from WVDEP in these situations. Lastly, Shell is considering building a "cracker" plant along the Ohio River in Beaver County. The facility would be a significant economic development for western PA and a significant permitting issue for PADEP, but could also result in significant water quality improvements due to site cleanup activities that could potentially be required.

Virginia

Mr. Newman reported on a legislative initiative being studied to combine the water departments of the Department of Conservation and Recreation, the agency handling nonpoint sources, with the VADEQ. VADEQ is also considering assumption of the federal 404 water quality certification program. Both of these initiatives will be reported back to the General Assembly next January.

Public Interest Advisory Committee

Mr. Janelsins reported that the Ohio River Sweep will be held Saturday, June 15. The Sweep is the largest event of its kind in the nation which typically has 21,000 participants. The committee had recommended that staff use webinars for public involvement in the pollution control standards review process. He reported that a number of committee members participated in the webinars, the system worked well in allowing for public participation, and he invited comments on the new process. Mr. Janelsins also reported that the committee currently has at-large openings which they would like to fill and he invited all to submit any suggestions to himself or Jeanne.

New York

Commissioner Wilson reported that NYDEQ is not approving out of state travel such that Jeff Konsella was not able to attend this meeting.

Indiana

Ms. Selvaratnam reported that revised chloride criteria and its antidegradation rule have been adopted by the Water Pollution Control Board in May, but will not be implemented until approved by USEPA. She also reported that a regional general permit for the Newburgh hydropower facility was denied by IDEM because of potential impacts to Indiana wetlands caused by the installation of transmission lines. IDEM has asked the company to reapply for an individual 401 permit. Commissioner Easterly reported that Indiana is, like Virginia, looking at consolidating its water programs under IDEM which are presently spread throughout various state agencies.

United States Geological Survey

Mr. Griffin reported that the FY12 USGS budget was only reduced by 1.5 percent overall, which was better than many federal agencies, while its stream gauging and coop programs had small increases. The Indiana and Kentucky Science Centers, under the leadership of Mr. Guertal, have developed a joint five-year science strategic plan which is unique within the agency that pools the resources of both science centers.

West Virginia

Mr. Mandirola reported that WVDEP's draft 303(d) list is out for public comment and the deadline has been extended to June 26. In the draft, certain sections of the Ohio are being delisted for iron due to less violations of the water quality criterion. Legislation going forward in the next session will address oil and gas water management plan requirements and will include a guaranteed pass by flow to protect all stream uses. Companies may be required to maintain flow measurement gauges to facilitate this requirement. The state has public noticed an oil and gas storm water construction permit which mimics the NPDES storm water general permit. WVDEP is working on a renewal of the NPDES permit for Dupont which will address C-8 and C-3 pollutant issues. They are also working on revisions to their aluminum and beryllium water quality criteria.

United States Army Corps of Engineers

Mr. Emery reported that the Corps will be rewriting MOUs with hydropower operators asking them to collect real-time water quality temperature and dissolved oxygen data and make it available on the web. This is required under the FERC operating licenses. The Corps is conducting a climate change study in the Ohio Basin that is currently getting underway; a report should be available in approximately eighteen months. Regarding harmful algal blooms, the Corps is developing public advisory protocols and is evaluating new analytical equipment for rapid identification and enumeration of algae. The Corps districts maintain water control manuals for every Corps reservoir which includes descriptions of how water releases are managed. The districts are to begin revising two manuals every year and agencies will have the opportunity for review and comment. Lastly, the Corps Pittsburgh District is working with The Nature Conservancy to expand its E-Flows study with PADEP to include stream reaches affected by reservoir storage and releases. The information will be used to update the Corps' Water Control Manuals mentioned previously.

Water Users Advisory Committee

Mr. Bargiel reported that the WUAC met on May 8-9, 2012 in Cincinnati. The water users have a concern about the maintenance of locks and dams and future funding to support such activities. The concern is that if these structures fail, Ohio River water utilities may lose their source water completely due to a drop in water level and not be able to provide potable water to the public. The Louisville Water Company experienced taste and odor problems earlier this year, and water utilities report such issues to ORSANCO. The committee is very interested in TDS and bromide studies being carried out by ORSANCO and PADEP. Water utilities are in the process of switching to chloramines for disinfection which may have an impact on the creation of disinfection byproducts. Mr. Bargiel reported that CONSOL is implementing a "smart release" program for some of its mine discharges which has resulted in a positive effect on TDS and bromide concentrations in the Monongahela River. He also reported that a new Organics Detection System station is going online at the Midland, PA water utility.

US Geological Survey

Mr. Guertal reported that the National Water Quality Assessment program is entering its third stage which will shift its emphasis to a more regional focus. There will be a significant effort in the Midwest which should complement existing monitoring efforts in the region. The first effort will be the joint USGS-USEPA synoptic study which will be managed out of the Indiana USGS office. Jeff Frey is the USGS project manager and would be available to make a presentation on the study at the next TEC meeting.

Power Industry Advisory Committee

Mr. Reash reported that the USEPA is scheduled to issue the 316(b) fish impingement/entrainment final rule on July 27 which quite likely will need to be extended. The steam electric effluent guidelines which were scheduled to be released in draft in July will now most likely not be released until sometime after the November presidential election. The Coal Combustion Byproduct Rule will also not likely be issued until after the election. AEP and EPRI will be conducting a mercury modeling study of the RC Byrd pool of the Ohio River to predict fish tissue mercury levels. A kickoff meeting has been scheduled for June 27 to be held at ORSANCO. This two-year effort will be a first regarding modeling for mercury in fish tissue concerning the Ohio River.

Kentucky

Mr. Payne provided an update on Kentucky's triennial review of its water quality standards. Significant revisions include changes to the narrative nutrient criterion which clarify that the criterion is to prevent nutrient impairment rather than addressing existing impairments. A public hearing will be scheduled for late August in Frankfort. New regulations for wastewater lab certification have been drafted and if approved become effective in February 2013. Three new mussel species present in the Ohio River have been listed as endangered including the Snuffbox, Spectaclecase and Sheepnose. The KYDOW has been working with third parties involved in required monitoring for coal mine permits to provide training in water quality and biological monitoring in an effort strengthen data reliability.

POTW Advisory Committee

Ms. Lodor reported that the committee developed a white paper on certain aspects of the Commission's recreational use water quality criteria which was presented to the Pollution Control Standards Committee at its April meeting. A recreational management tool is being developed by Cincinnati MSD with participation by ORSANCO and SD1 of Northern Kentucky. This tool uses rainfall and river flow information as input to a model to predict bacteria levels in the Ohio River. A smart phone application is being developed to inform the public about predicted water quality conditions to assist them in making informed decisions about using the river for recreation. The public and river community has also been solicited for input regarding the recreational management tool. Additional information such as weather is also provided with the smart phone application. Results of the model will be compared against actual data to verify the accuracy of model results.

Next Meeting

The next meeting of the Technical Committee will be held on October 9-10, 2012 at The Brown Hotel in Louisville, KY.

Adjournment

The 199th meeting of the ORSANCO Technical Committee was adjourned on Wednesday, June 13, 2012.

Approved:

Toby Frevert, Chairman

Prepared by Jason Heath, P.E., BCEE

(Tape recording of proceedings available at Commission Headquarters)

PowerPoint presentations from this meeting are available on the Commission web site at www.orsanco.org.

Roster of Attendance

Technical Committee

Chairman Illinois Indiana Kentucky New York Ohio Pennsylvania Virginia West Virginia Federal (US EPA) **US** Coast Guard US Army Corps of Engineers US Geological Survey **ORSANCO** Chief Engineer **Chemical Industry Committee** POTW Advisory Committee Power Industry Advisory Committee Public Interest Advisory Committee Water Users Advisory Committee Staff Liaison

Commissioner Toby Frevert Marcia Willhite Shivi Selvaratnam **Randy Payne** Not present George Elmaraghy Ron Schwartz Allen Newman Scott Mandirola Not present Not present **Erich Emery Bill Guertal** Peter Tennant No representative MaryLynn Lodor Rob Reash **Eriks Janelsins Ron Bargiel** Jason Heath

Commissioners

Stuart Bruny, Doug Conroe, Chuck Duritsa, Tom Easterly, David Flannery, Sandy Gruzesky, Ken Komoroski, Ron Lovan, Phil Morgan, Scott Nally, Greg Phillips, Paul Tomes, Mike Wilson, Ross Wales - Commission Legal Counsel

Staff

Ryan Argo, Dave Bailey, Sam Dinkins, Tracey Edmonds, Joe Gilligan, Jeanne Ison, Jerry Schulte, Jeff Thomas, Greg Youngstrom

Guests

Cheri Budzynski	Shumaker, Loop, and Kendrick		
Tom Horan	PPG		
Lori Leffler	PPG		
Aaron Pozar	ArcelorMittal		
Jim Rock	PPG		
John Spaeth	MBI		